

DANUBE STORY TELLING CARDS >

The story telling cards have been prepared in the frame of the DTP PAC2-PA04 (PA04 Water quality) project.

The Water Quality Priority Area (PA4) is one of the eleven priority areas of the EU Strategy for the Danube Regional (EUSDR) with the main objective to realize the integrated river basin management measures in the Danube Region in line with the EU Water Framework Directive and with the International Danube River Basin Management Plan (DRBMP) in order to save human health and freshwater ecosystems.

The EUSDR PA4 puts a strong emphasis on the protection of water resources and also to raise public awareness in this very topic.



Danube Story Telling Cards – Rules

Rule 1

Each player takes 5 cards in his hand. Whoever starts, selects a card in thought, says a characteristic to that card. S/He then flips the selected card to the center of the table. Each player selects a card from their own based on the feature said by the first player. S/He then flips the selected card to the center of the table. The starting player shuffles the cards face up on the table, then turns them over. The others have to figure out which card the starting player might have thought of. The winner is the one who figured out which card belonged to the starting player. In the next round, the winner starts.

Rule 2

Each player takes 5 cards (those who are more skilled can play with 10 cards). It is up to the players to come up with a story or description about nature or the environment based on the cards in their hands. Once the story has been found out, the novice player places the cards in his or her story on the table, in the order in which you would like to tell the story. Then he/she tells the story he/she made up. Then the next player comes and so on. The winner is the one who was able to include the most cards in his story.

Rule 3

We place 10 cards in two rows (five to five) on the table. It is up to the players to find connections between the cards and figure out a story based on that. The first player starts telling the story based on the cards and can take as many cards as he draws into the story. We replace as many cards on the table as the previous player took so that there are always 10 on the table. The next player tells the story in the next round. Cards are replaced for as long as the number of cards allows. The winner is the one who collected the most cards during the game.

Danube Story Telling Cards – Rules



Rule 4

Deal 7-7 cards to the players. The starting player places a card of his choice on the table and says a feature (eg blue) and then draws another card. The next player must select the card associated with the feature from their own cards and add another feature based on their own card (e.g., blue and water) and then draw a new card. The round goes on until players can always place a card on the table accompanied by another feature. The winner is the one who last placed a card on the table. That can take the deck away. The final winner is the one with the most cards in the end.

Rule 5

Center the deck of cards face down. Take one off the top of the deck and turn it over. The first player must be told a feature about the picture on the card. The next player must add more information to the picture. The card can be taken by the last person who was able to add something new to what was said. The task is to tell as much as you can about each card.

Danube Story Telling Cards

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- The Danube maps and the EU flag »
 - The Danube flora and fauna »
 - Phenomena and conditions of water »
 - Human works, consumables related to water and river - use and utilization of water »
 - Human activities that pollute our waters and rivers destroy their wildlife »
 - River regulation »

The Danube maps and the EU flag cards #1



Danube River Basin

The Danube Basin has a rich cultural heritage, as the Danube is the most international river in the world, passing through ten countries, but the Danube collects its water from 19 countries. The Danube originates in Germany, flows through Austria, Slovakia, Hungary, Croatia, Serbia, Bulgaria, Romania, Moldova and Ukraine, and finally flows into the Black Sea. There are several capitals along the Danube, such as Vienna, Bratislava, Budapest and Belgrade.

The Danube maps and the EU flag cards #2



Danube Delta Estuary

The Danube Delta Estuary is the part of the river where the Danube enters the Black Sea. The delta estuary is formed by depositing its alluvium before the river flows into the sea and then bypassing it to form a roughly triangular shape on the sea shore. In addition to the Danube, other rivers enter their sea in the form of delta estuaries (e.g. the Nile, Po, Ganges or the Mekong). The Danube Delta is home to the largest pelican colony in Europe. Do you remember where the Danube River comes from?

The Danube maps and the EU flag cards #3

Black Sea

Located between the Black Sea, Europe and Asia. It is important to us because the “receiving” sea of the Danube River and the water of the Danube, after a journey of 2,850 km, flows into the Black Sea through a delta estuary. The Black Sea is surrounded by six countries: Bulgaria, Georgia, Russia, Romania, Turkey and Ukraine. However, only three of the six countries flow through the Danube - Bulgaria, Romania and Ukraine.



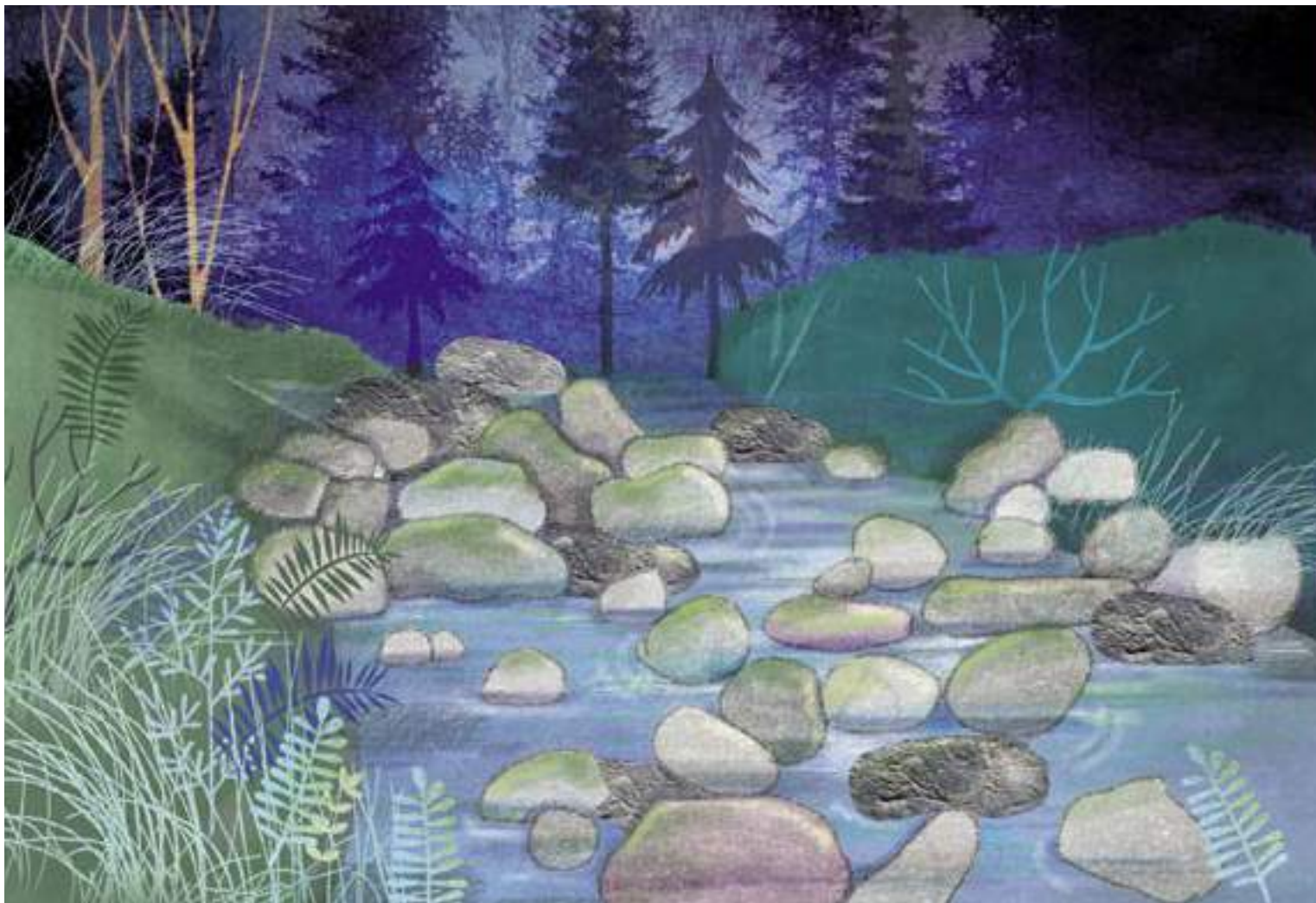
The Danube maps and the EU flag cards #4



EU flag

The European flag has a blue background and on this background there are twelve five-pointed golden stars forming a circle. What can the stars symbolize? One explanation is that the stars symbolize the ideal of unity, solidarity and harmony among the peoples of Europe.

The Danube flora and fauna cards #1



Black Forest

The Black Forest, located in Baden-Württemberg, in the south-west of Germany, is particularly important to us because the Danube flows somewhere from the depths of the Black Forest and will become the river at the confluence of two small streams at Donaueschingen, which then, after a journey of 2,850 km, flows into the Black Sea.

The Danube flora and fauna cards #2

Island

An island is a land completely surrounded by water that is smaller than the mainland. When several islands are close to each other, they are collectively called an archipelago. In co-operation with Danubeparks, an inventory is being made of the Danube islands from Germany to Romania. During the survey, 912 islands were recorded along the Danube, of which 147 are considered untouched, the most natural category of islands. Do you know islands near where you live? What do you know about it?



The Danube flora and fauna cards #3



Floodplain forest

A special forest that develops on the banks of rivers and is made up of groups of trees of moisture-loving varieties.

The Danube flora and fauna cards #4



Wetlands

Wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres” as defined by Article 1 of the Convention on Wetlands (Ramsar, Iran, 1971). Hence, as defined by the Convention, wetlands include a wide variety of inland habitats such as marshes, peat-lands, floodplains, rivers and lakes, and coastal areas such as saltmarshes, mangroves, intertidal mudflats and seagrass beds, and also coral reefs and other marine areas no deeper than six metres at low tide, as well as human-made wetlands such as dams, reservoirs, rice paddies and wastewater treatment ponds and lagoons.

Unfortunately, today, due to river regulations, the extent of wetlands has been significantly reduced and therefore it is an important task to restore wetlands as much as possible.

The Danube flora and fauna cards #5

May-fly (*Palingenia longicauda*)

Did you know? Every year for some days between late spring and early summer the Tisza is blooming with millions of “Tiszaflowers”. This long-tailed mayfly (*Palingenia longicauda*) is the largest in Europe and called “Tiszaflower” by the Hungarians. It lives for 3 years as larvae at the river bottom and breaks at the surface where males molt and females hatch. Just before sunset the beautiful bridal-dance called “blooming” begins and the river’s surface ex-plodes to life. Shortly after the mating, females lay eggs on the river from where they drift to the bottom. The spectacle is over and darkness covers millions of dead bodies on the river surface... the mayflies perish.

http://archive.iwlearn.net/icpdr.org/icpdr-pages/tisza_basin.htm



The Danube flora and fauna cards #6

Beaver

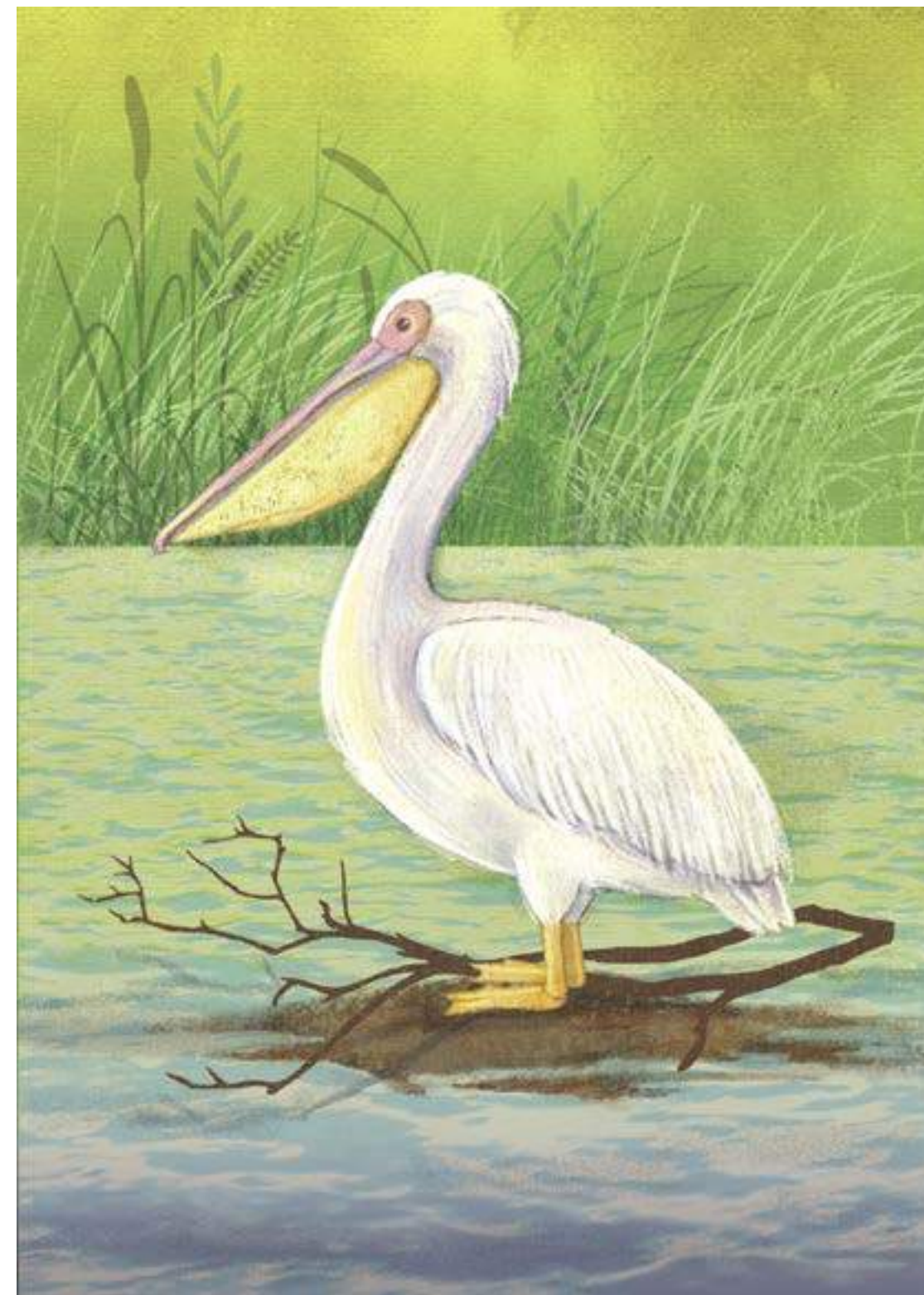
The Eurasian beaver (*Castor fiber*), which is also found in the Danube area, is a large rodent and once inhabited the riverine groves and stagnant waters of our entire continent. Later, the numbers also decreased a lot due to the dwindling and hunting of the precursors, therefore, by the beginning of the twentieth century it had become extinct in much of Europe. The main feature of the beaver is its ability to cut down huge trees using its orange pruning tooth. His flat tail is also very distinctive, with which he deftly steers himself in the water. The beaver is also famous for building dams, larger or smaller, to keep them unnoticed by predators through elevated water levels. Large-scale dam construction is not so much characteristic of the Eurasian beaver as it is of its relative, the Canadian beaver, living in America. The beaver protection and restocking program can therefore be considered a success, but at the same time it is important that the beavers' active dam construction habits do not pose a problem in flood control.



The Danube flora and fauna cards #7

Pelican

The habitat of Europe's largest pelican colony today is the Danube Delta. Eight species of pelican are known worldwide. In Europe, respectively, there are two species living in the Danube Delta: the rosy and the badger. The pelicans are real giant birds, their body weight can reach 10-12 kilograms, the wingspan is almost 3.5 meters.



The Danube flora and fauna cards #8



Sand martin (*Riparia riparia*)

A small bird belonging to the swallow family spends in cavities carved into sand walls. Vertical nesting sites of suitable size are formed on riverbanks, but even on the shores of lakes, in water-collapsed bank walls and in sand mines. You can settle almost anywhere if you find a suitable nesting place for yourself. Due to river regulations, the natural habitats of the coastal swallow are disappearing throughout Europe. The endangered swallow drifted to the brink of extinction due to human activity, hydropower, embankments, expanding agriculture, and excessive use of pesticides, among others.

The Danube flora and fauna cards #9

Migratory fishes

Most of the fishes in the Danube depend on connectivity between upstream and downstream river reaches, or between river channels and floodplain habitats. Periodic migration through a particular area of the river systems often plays an essential role in life history of fluvial fish. The Danube river system harbours the richest fish fauna of any European river. Diverse habitats created by the river and its tributaries host a unique mix of species with about 100 fish species. (Balon et al. 1986, Holčík et al. 1989). Migratory fish, especially sturgeons are particularly sensitive to environmental changes due to their extended longitudinal migration range and long-lasting reproductive cycles, therefore their native populations can be considered one of the best indicators for integrity of ecological corridors and fluvial habitats in the Danube River system.

Migration distances vary widely between or within populations of a single species. General movements of fishes of the Danube can be described in the following categories of migration distance (Waidbacher and Haidvogel 1989, Schmutz and Mielach 2013):

- long distance – migration of more than 300 km in one direction within a year
- medium distance – migration between 30 and 300 km in one direction within a year
- short distance – local migration of less than 30 km

See more here: <https://waterquality.danube-region.eu/promoting-measures-to-enable-fish-migration-in-the-danube-river-basin/>



The Danube flora and fauna cards #10



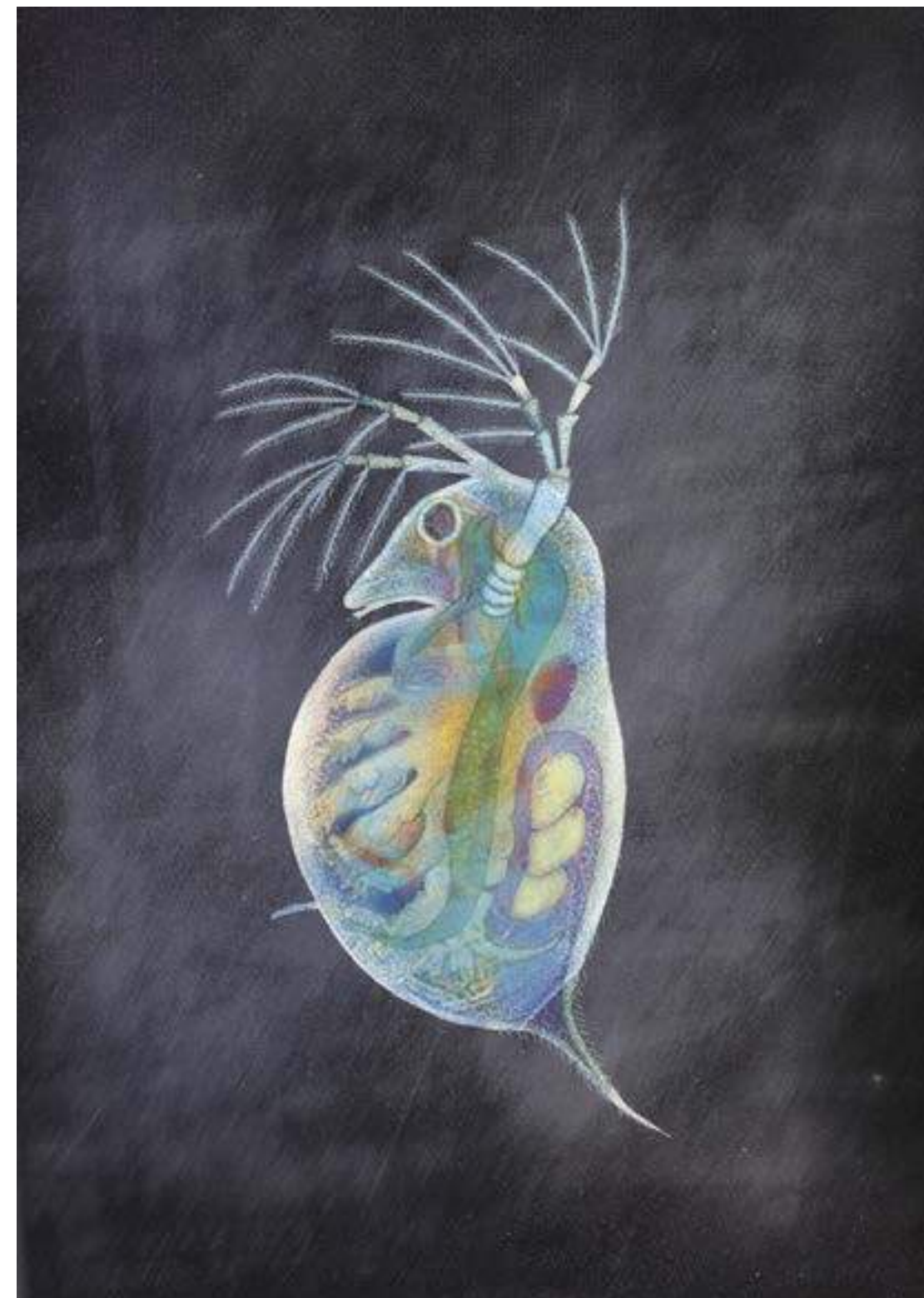
Snails, Shells

Macroscopic invertebrates find their living conditions on the coastal, near-shore subsoil, on the coastal artificial rock scattering, on the muddy shore of the riverbed. Macroscopic invertebrates from snails and shells are mainly characteristic of the slow-flowing, lower section of the Danube. The fauna of rock scattering due to riverbed regulation and coastal protection is richer than that of the riverbed.

The Danube flora and fauna cards #11

ZooPlankton

Plankton are a mixture of plants, animals, and bacteria, usually of microscopic size, that inhabit water and drift with currents floating in open water. Plankton can be divided into three groups, there are bacterioplankton, phytoplankton and zooplankton. Members of zooplankton are floating multicellular animals. They vary in size in different waters. It is an important food base for many fish species.



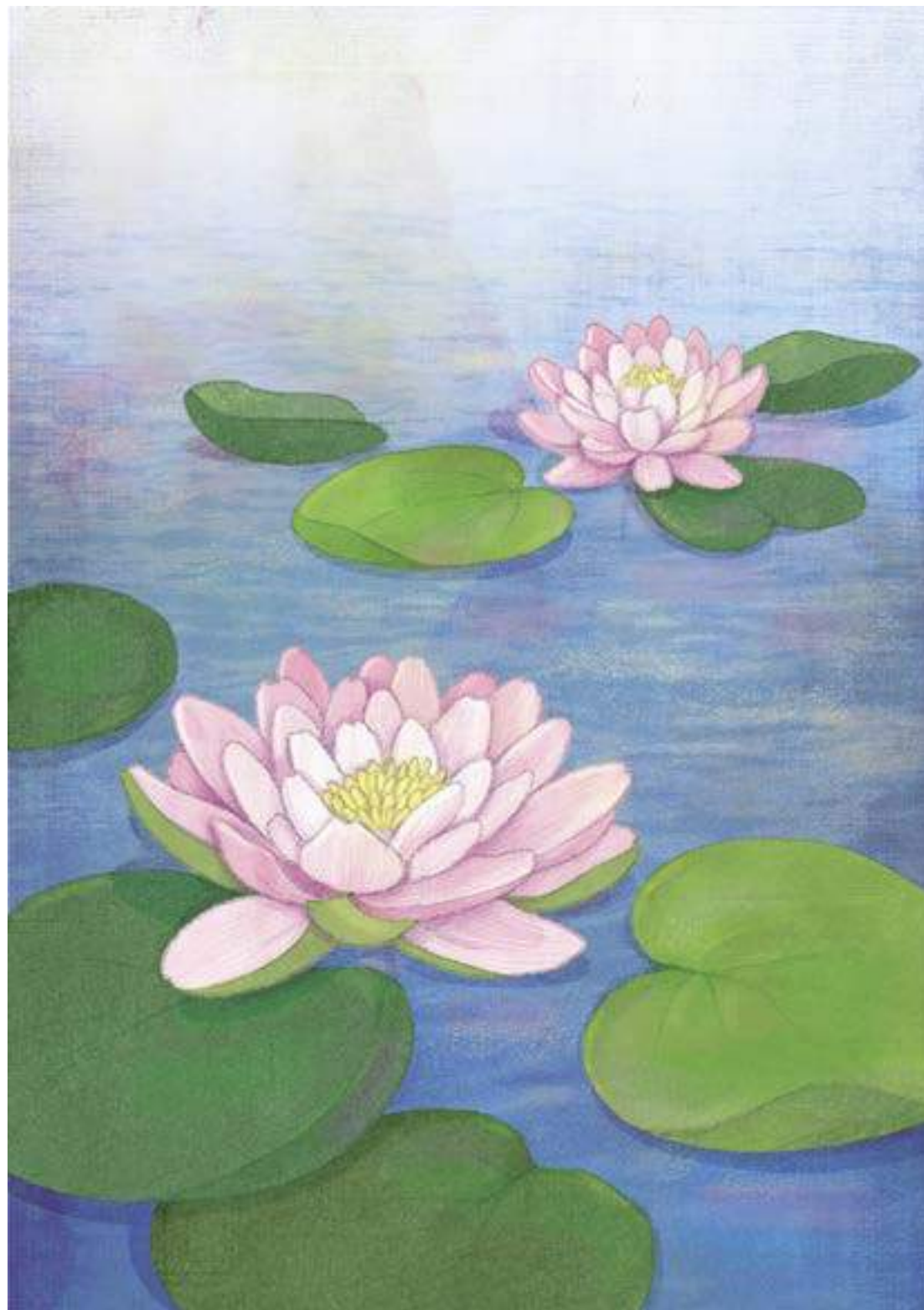
The Danube flora and fauna cards #12



Phytoplankton

Plankton are a mixture of plants, animals, and bacteria, usually of microscopic size, that inhabit water and live in currents and drift with currents. Plankton can be divided into three groups, bacterioplankton, phytoplankton and zooplankton exist. Phytoplankton are composed of microscopic single- and multicellular and colony-forming algae. The main constituents of phytoplankton are algae, which live in a layer of water illuminated by light. Algae live only in a layer illuminated by light. Under favorable conditions, the number of algae can increase exponentially in nutrient-rich disputes. The phenomenon is water bloom or algae invasion.

The Danube flora and fauna cards #13



Water lily

Water lily is typically an associated plant, so it is more characterized by clustered fields covering a large body of water. The backwaters are an ideal habitat for water lilies because it loves slow-flowing or stagnant waters with muddy bottoms. It is perennial, so it sprouts from the rootstock in the mud every year, so if it does not suffer more serious damage, it can be seen in the same place year after year. Its flowers close at night and sink under the water. They reappear in the morning, open pretty slowly, and then, following the course of the day, they always turn a little there.

Phenomena and conditions of water cards #1



Water drop / Drinking water

H₂O - water is a colorless, odorless, tasteless, liquid substance, a basic condition of life on earth. More than 70% of our earth's surface is covered by water, only a very small part of which is freshwater (2.5%) and the rest is salt water, which is found in seas and oceans. The rivers, such as the Danube, are also fresh water and it is a very important task for us to take care of their cleanliness.



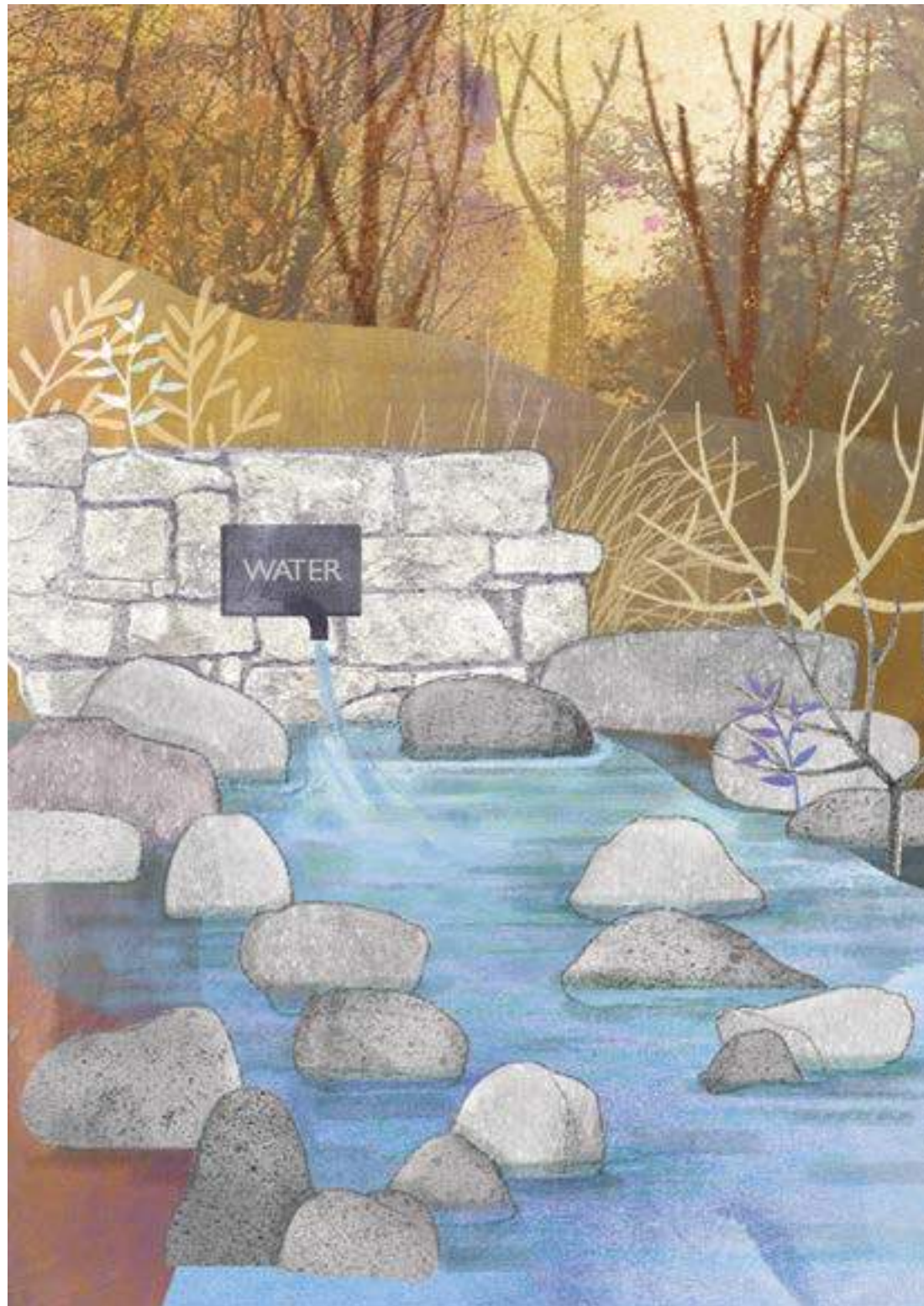
Phenomena and conditions of water cards #2



Snowflake

The snowflake is made up of tiny ice crystals that form in the Earth's atmosphere and fall like frozen precipitation. The formation of a snowflake requires microscopic super-cold water droplets to form in the clouds, which freeze. Snowflakes can form in many sizes, shapes and patterns. Did you know that all snowflakes have the same regular hexagonal shape of ice crystals, which form shapes similar to hexagonal and hexagonal stars?

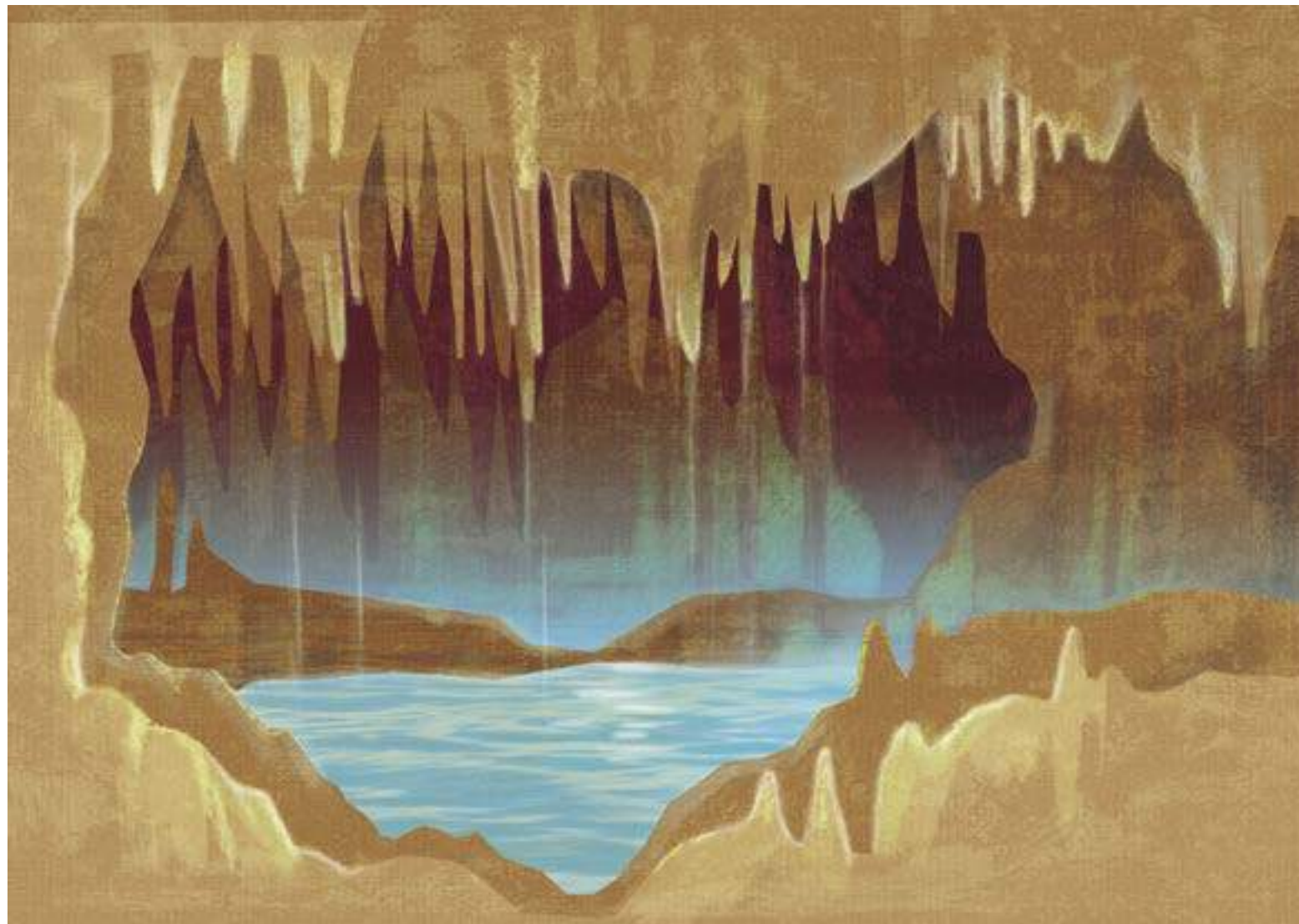
Phenomena and conditions of water cards #3



Source

The place where groundwater appears on the surface. They can be natural and busy sources. We group them in many ways.

Phenomena and conditions of water cards #4



Karst water

Water moving and stored in cracks in carbonate rocks. It is also involved in the release of the crack network itself, continuously shaping its depth environment.

Phenomena and conditions of water cards #5

Thermal water

There are many definitions of thermal water. We have to list here waters that are warmer than the average temperature of the hottest month of a given geographical area. 25 or 30 ° C is also often used as a limit. But there is also a definition that considers any water (spring) warmer than its surroundings to be hot. Moreover, some approaches link thermal waters to normal human body temperature (36.5–37.5 ° C).



Phenomena and conditions of water cards #6

Water Cycle



The water cycle is the special process that describes to us how water from the seas and oceans will rain (rain) and how this rain will return to the seas, oceans. How is this? First, the rays of the sun heat the waters of the seas, causing some water droplets to rise, turn into steam, that is, evaporate. During takeoff, the air full of steam droplets cools, at which point the steam droplets turn into water droplets again, forming a cloud. The wind diverts the clouds towards the land. In high mountains, for example, some of the clouds become congested, water droplets cool, and become heavier. The cloud eventually bursts out and the water droplets fall to the ground in the form of rain. Some of the precipitation that reaches the surface of the earth moves on the surface, another part seeps into the soil. Precipitation that falls to the surface moves in beds, in the form of watercourses, or results in standing waters on the surface. Some of the water that enters the soil slowly seeps back into smaller streams and then from there into the sea.

Phenomena and conditions of water cards #7

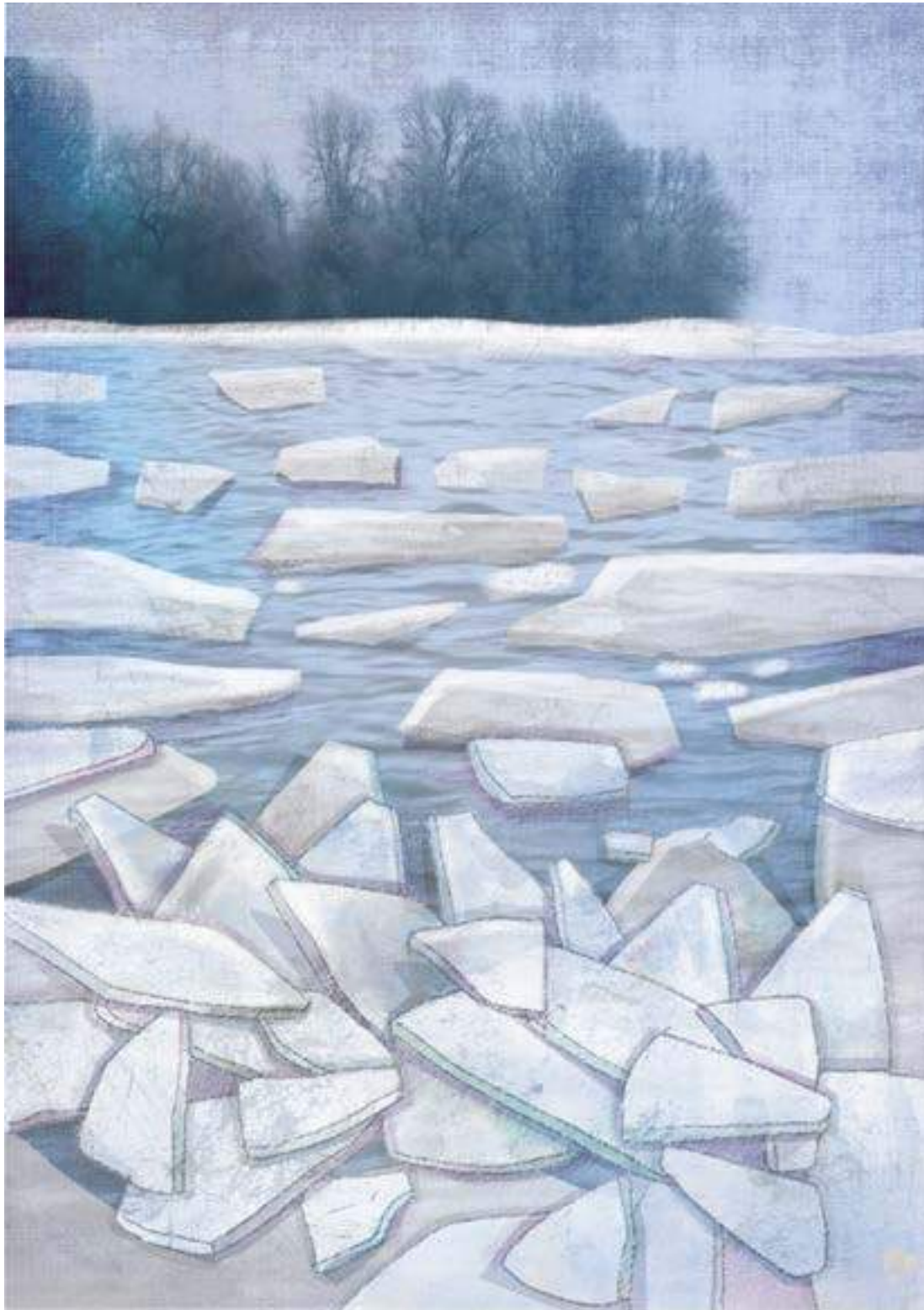
Flood

A permanent rise in the water level of a river to such an extent that the water exits the riverbed. It is usually caused by heavy rainfall and snowmelt. The area flooded by the flood is the floodplain. Flood protection: Protection against high water levels (floods) that have a detrimental effect on human facilities and economic activity, which is most often solved by regulating the river bed and parallel embankment at greater or greater distances along the river bank.

‘Flood’ means the temporary covering by water of land not normally covered by water. This shall include floods from rivers, mountain torrents, Mediterranean ephemeral water courses, and floods from the sea in coastal areas, and may exclude floods from sewerage systems according to Article 2.1 of the Floods Directive 2007/60/EC.



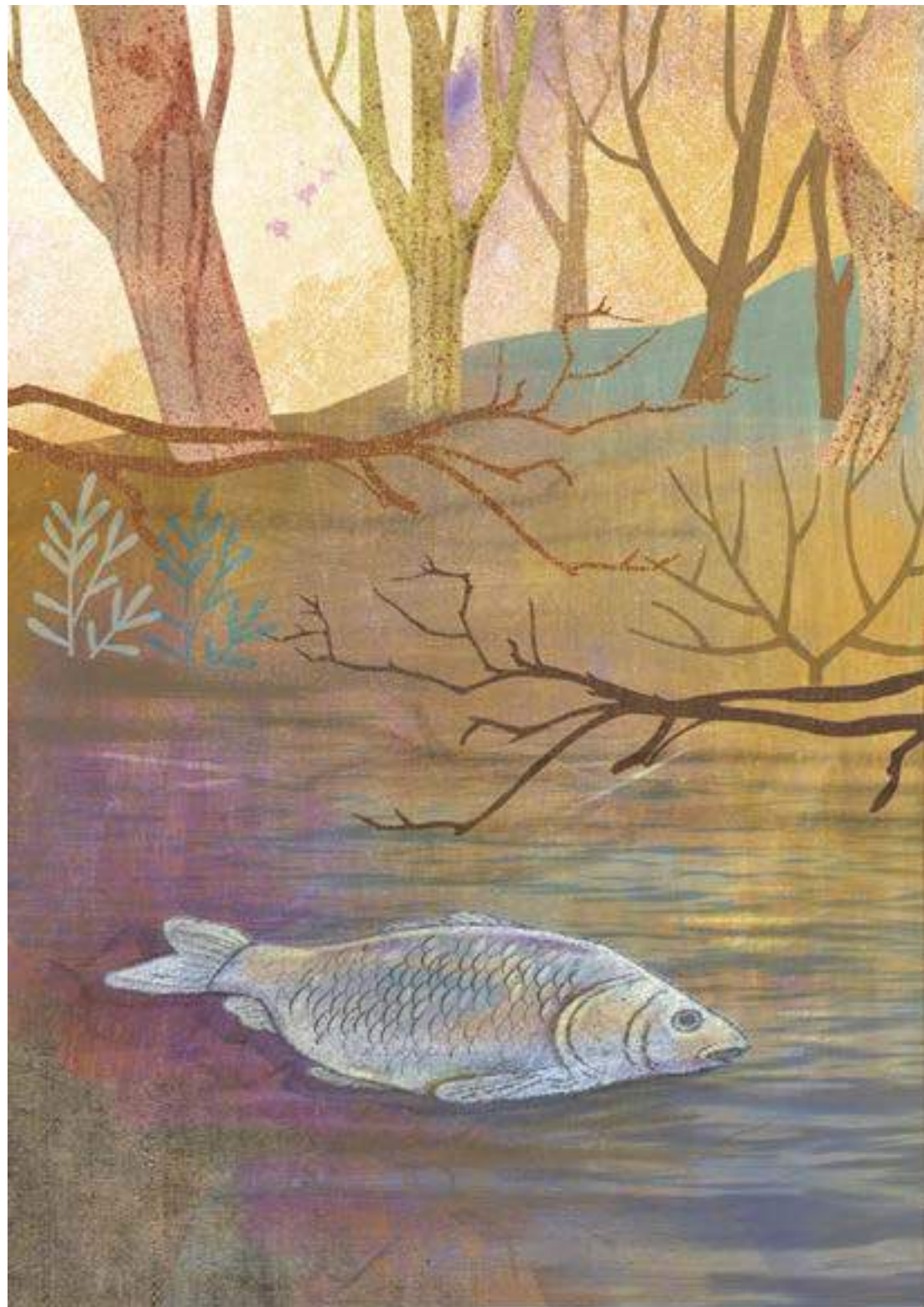
Phenomena and conditions of water cards #8



Ice formation

Fracture of a coherent ice sheet formed in surface waters. Appearance of floating ice sheets on rivers, congestion of ice sheets on lakes driven by wind.

Phenomena and conditions of water cards #9



Drought

Drought is a prolonged lack of precipitation coupled with high heat. It directly affects agriculture in the first place, and it has an impact on all other areas of the economy. The use of drought is often confused with that of water scarcity. Drought is temporary in time, while water scarcity is permanent. Water scarcity, which is the result of excessive water use from human activities, must also be interpreted differently when preparing for drought management. The latter includes drought monitoring, mitigation and reduction of drought damage. There are several types of drought (e.g. meteorological, hydrological, agricultural, economic, social droughts, depending on what we are studying). Dehydrated riverbed: we are talking about two different phenomena. In the first case (drought) we speak of a natural phenomenon when permanently little rainfall falls on the ground. In the case of water scarcity, water scarcity develops as a result of disproportionate human water uses.

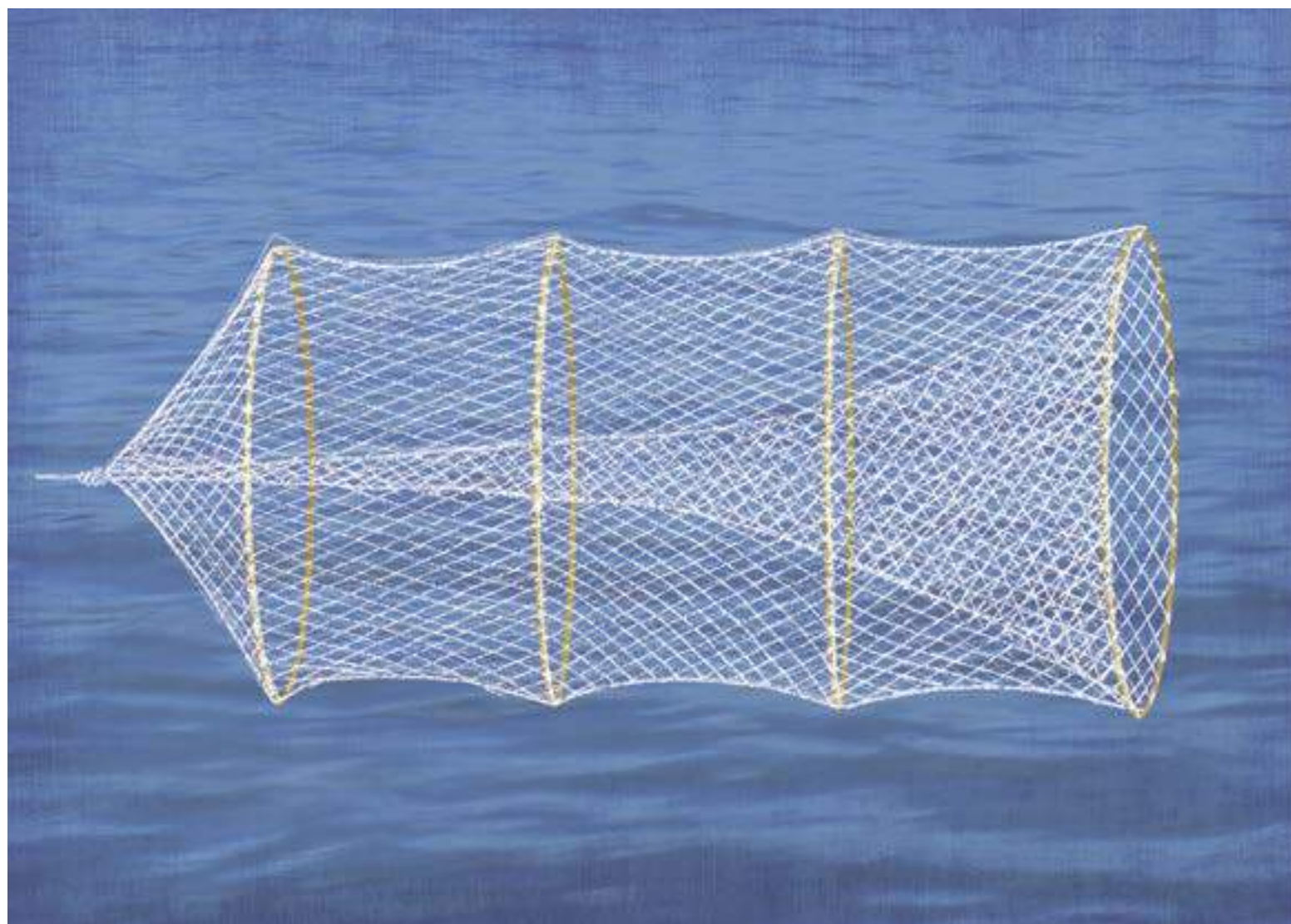
Human works, consumables related to water and river - use and utilization of water cards #1

Mill, ship mill

A mill is a facility for grinding solids (eg wheat) that used to be driven by wind or hydropower. Occasionally, animal-powered dry mills were used. The watermill uses hydropower as a resource, primarily for grinding grain. The mills and machines erected by rivers or streams of watermills were driven by a water wheel. However, there are watermills - ship mills - that are built on ships built for this purpose and anchored on rivers with high water yields but low falls. The advantage of the ship mill was that it could change its position according to the movement of the water. Its disadvantage is that it had to be taken to a port without ice during the winter or towed ashore.



Human works, consumables related to water and river - use and utilization of water cards #2



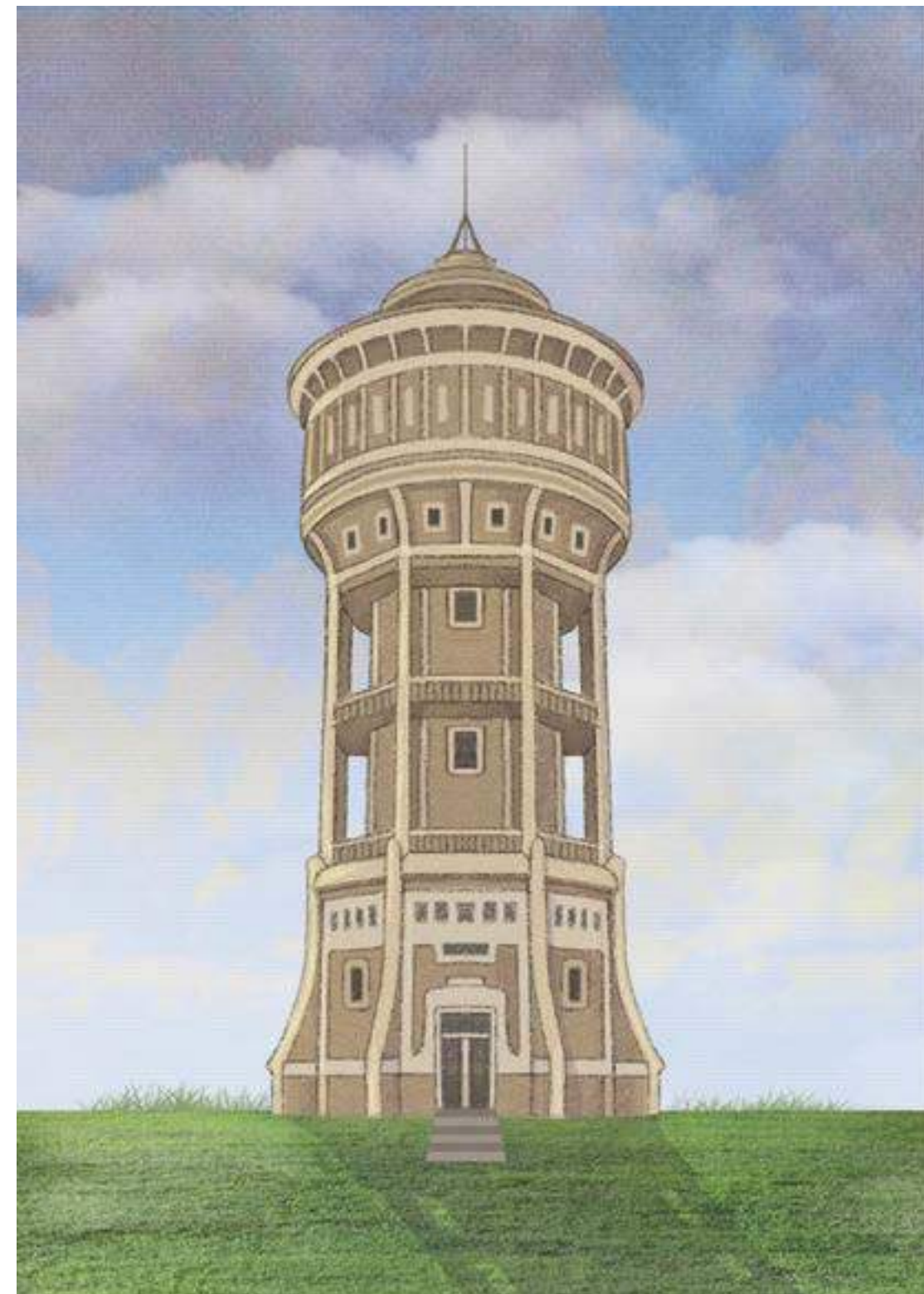
Fish pot

A fishing net that is usually immersed in the bottom of the water; A funnel-shaped hollow fish-catching device with a funnel-like opening, of which many variants are known according to the course of the waters and the properties of the fish. We already have diplomatic data on the use of crows since the 13th century, but net crows have probably only spread in the hands of peasant fishermen since the 18th century.

Human works, consumables related to water and river - use and utilization of water cards #3

Water Tower

Have you ever wondered why water flows out when you open the tap? There is almost always water in the settlements, and in many cases this is due to the water towers (hydroglobuses), which are actually very simple structures. They differ in size, shape, but have the same property: each is a simple tank filled with water, placed at the right height. The water tower is placed so high that the hydrostatic pressure thus generated by gravity is sufficient for the network to operate. Hydrostatic pressure is the pressure resulting from the weight of a fluid because the particles of the fluid press against each other. After lifting high, the water continues to move according to the principle of transport vessels. Did you know? Skyscrapers are usually supplied with water by separate water tanks (water towers) located on the roof of the building.



Human works, consumables related to water and river - use and utilization of water cards #4



Bridge

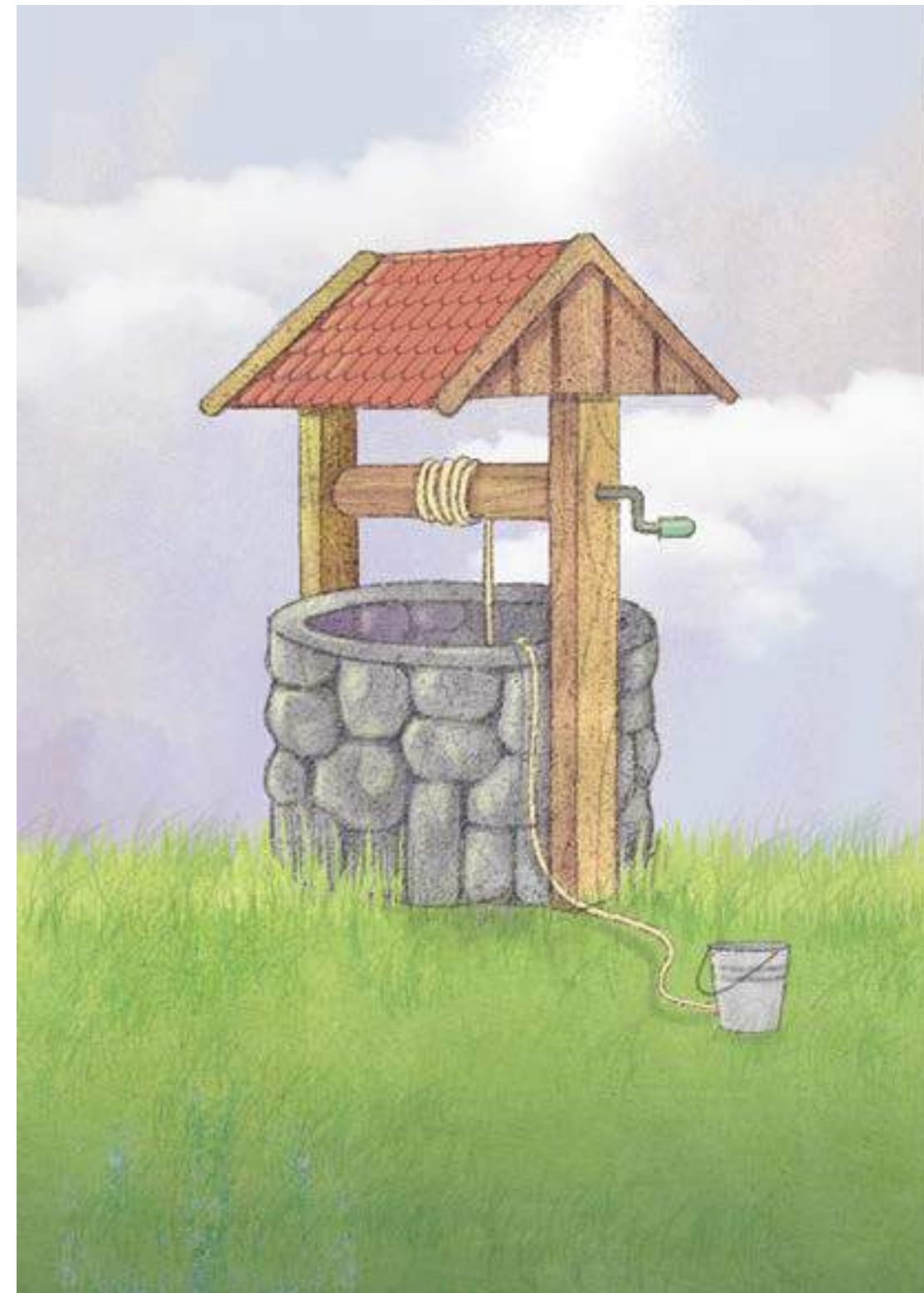
A bridge is a structure that creates a transport or transportation connection between areas on either side of a gorge, valley, road, rail, river, other body of water, or other physical barrier. There is also a lot of traffic on the bridges, as it has to be designed for pedestrians, cars, railways, but sometimes also for shipping.

Human works, consumables related to water and river - use and utilization of water cards #5

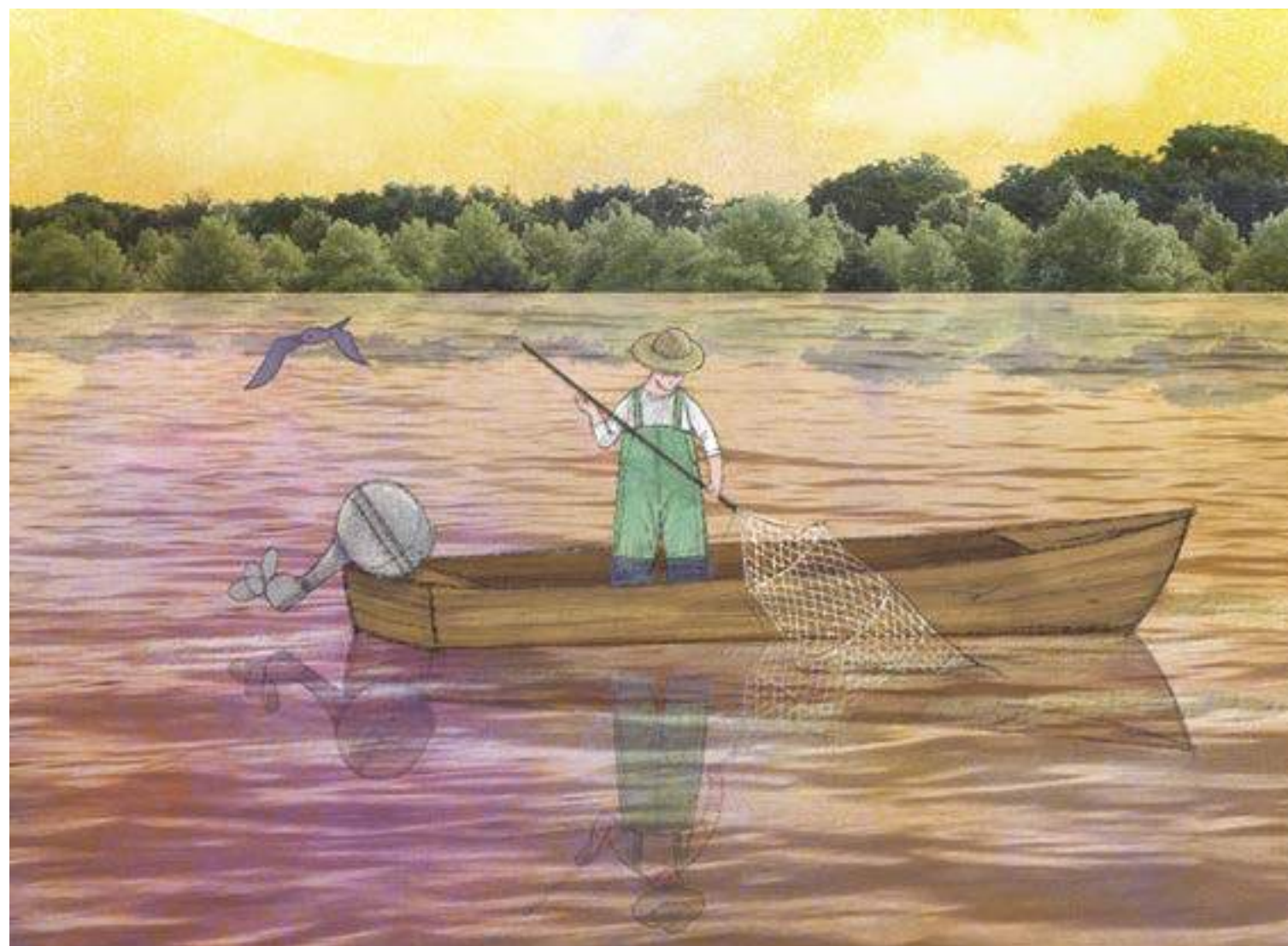


Well

A well is a structure made for water supply. There are two major types of wells, because sometimes groundwater close to the surface is used to exploit water in deeper layers. We know of many wells of different designs for collecting groundwater. Have you ever seen a well near your place of residence or during your excursions?



Human works, consumables related to water and river - use and utilization of water cards #6



Fisherman

Fishing or pisciculture is the activity of catching fish. They usually catch fish in the wild. This can be done by hand, harpoon, hook, net or trap. Pisciculture is a tens of thousands-year-old human activity that, along with hunting, has played a major role in the development of humanity and also determines the current lives of several ethnic groups.

Human works, consumables related to water and river - use and utilization of water cards #7



Tugboat

A tugboat (or tug-pusher) is a special power machine which, due to its high traction, is capable of towing other vessels or barges (floating units) connected to it.

Human works, consumables related to water and river - use and utilization of water cards #8

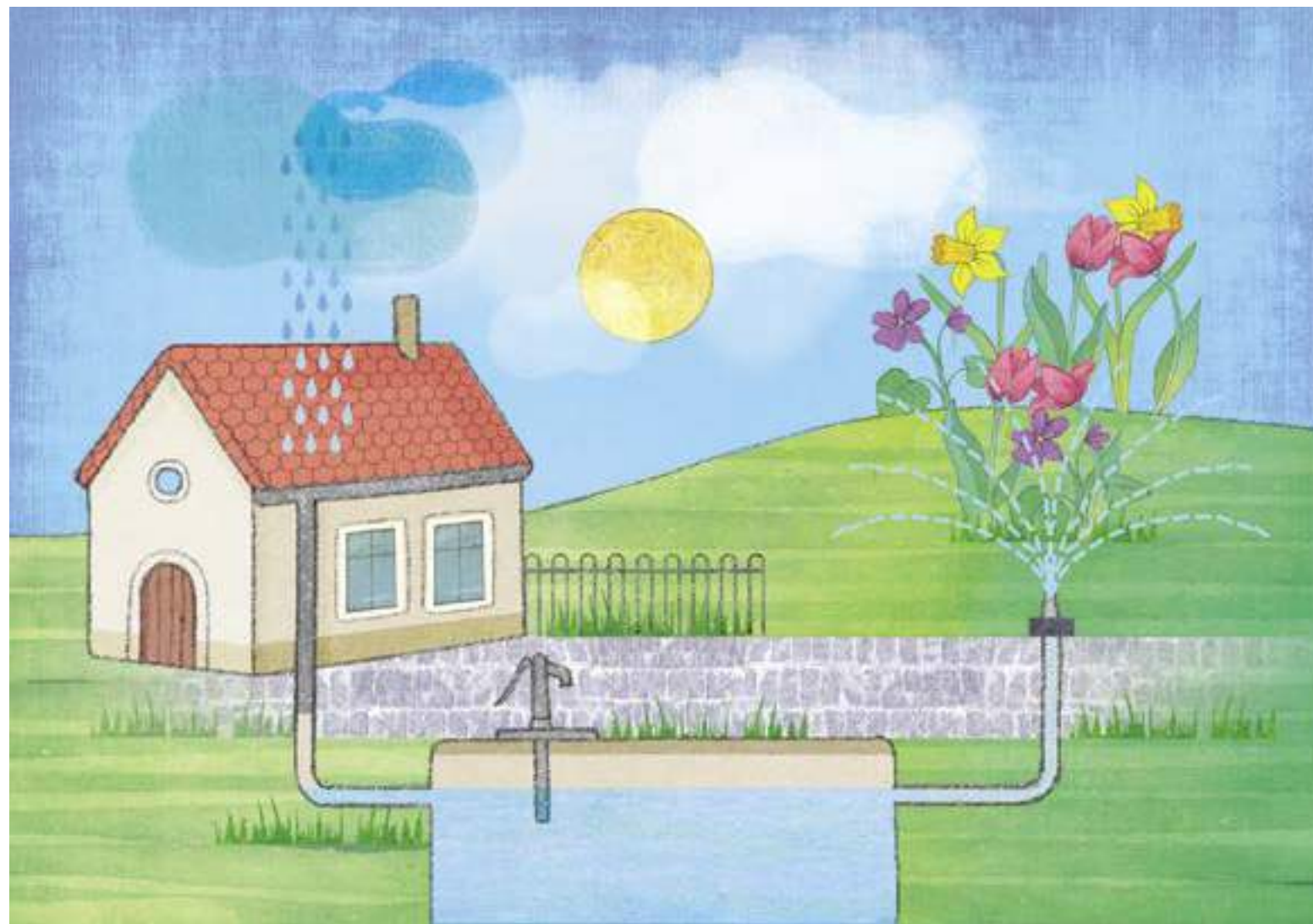
Floodplain management

The floodplain of a river is the area that would be flooded if there were no flood defense systems in place. The area between the river bed and the embankment is the floodplain, which is important in draining the flood. It is not allowed to construct or install anything at the floodplain. Floodplain management is a multi-purpose and environmentally friendly land use system. Floodplain farming is one of the best-known and best-researched farming practices, the cultivation of which was first demonstrated along the Danube, but its traditions could also be observed along the Tisza. On the one hand, the floodplain provided the natural fodder base for animal husbandry, and on the other hand, it was a classic area of differentiated, economic activity adapted to the fluctuations of the water level of the rivers.



Human works, consumables related to water and river - use and utilization of water cards #9

Water tank



Have you ever thought that it would be good to collect and reuse rain from the sky? Where we have the opportunity to collect rainwater, don't miss to do that, as it is available to us free of charge and can be used perfectly for secondary things that do not require drinking water. Water the plants with completely unnecessary drinking water, rinse and wash the toilet when they can be easily replaced with collected rainwater. We can even use it in the washing machine, and we'll even do good with it, as it won't become limescale any time soon. Rainwater harvesting starts from roof structures, solid ground coverings are not suitable for this as they are exposed to greater contamination. In order to use rain water, we have to store it somehow. The best solution lies in the water tanks. The water tank is thus a large tank that stores the rainwater collected from the roof structure.

Human works, consumables related to water and river - use and utilization of water cards #10

Water use in households

The amount of water consumed has changed steadily throughout history and is still changing. In the past, people mostly transported water (e.g. in jugs) from the source (rivers or wells) to the place of use. The jugs and water were heavy, so this type of transportation limited water consumption to the required level. In households, water was mainly used for drinking, cooking and limited to livestock-related activities. Washing was usually solved by rivers. Households used to supply their water from public wells but later transported the water directly to their homes through pipelines. After that, water consumption increased rapidly due to washing clothes at home. What else do we use water for in households today?



Human works, consumables related to water and river - use and utilization of water cards #11

Kayaking-Canoeing

Kayaking-canoeing is a water sport and they differ in that athletes sit in the direction of travel in a kayak and kneel in a canoe, driving their boats forward with their paddles. Kayakers paddle with a two-feather paddle on both sides, and canoes paddle with a single-feather paddle on one side. In summer, we can often see hiking kennels on the rivers, moving slowly in small or larger groups along the water, enjoying the beauty of the landscape around them.



Human works, consumables related to water and river - use and utilization of water cards #12



Beaching

Have you ever been to a beach? Then you must know what a cool place it is. The beach is a naturally or artificially formed surface form on the waterfront, a transitional area between the land and the water surface. In summer it is a pleasant place to sunbathe, play and bathe.

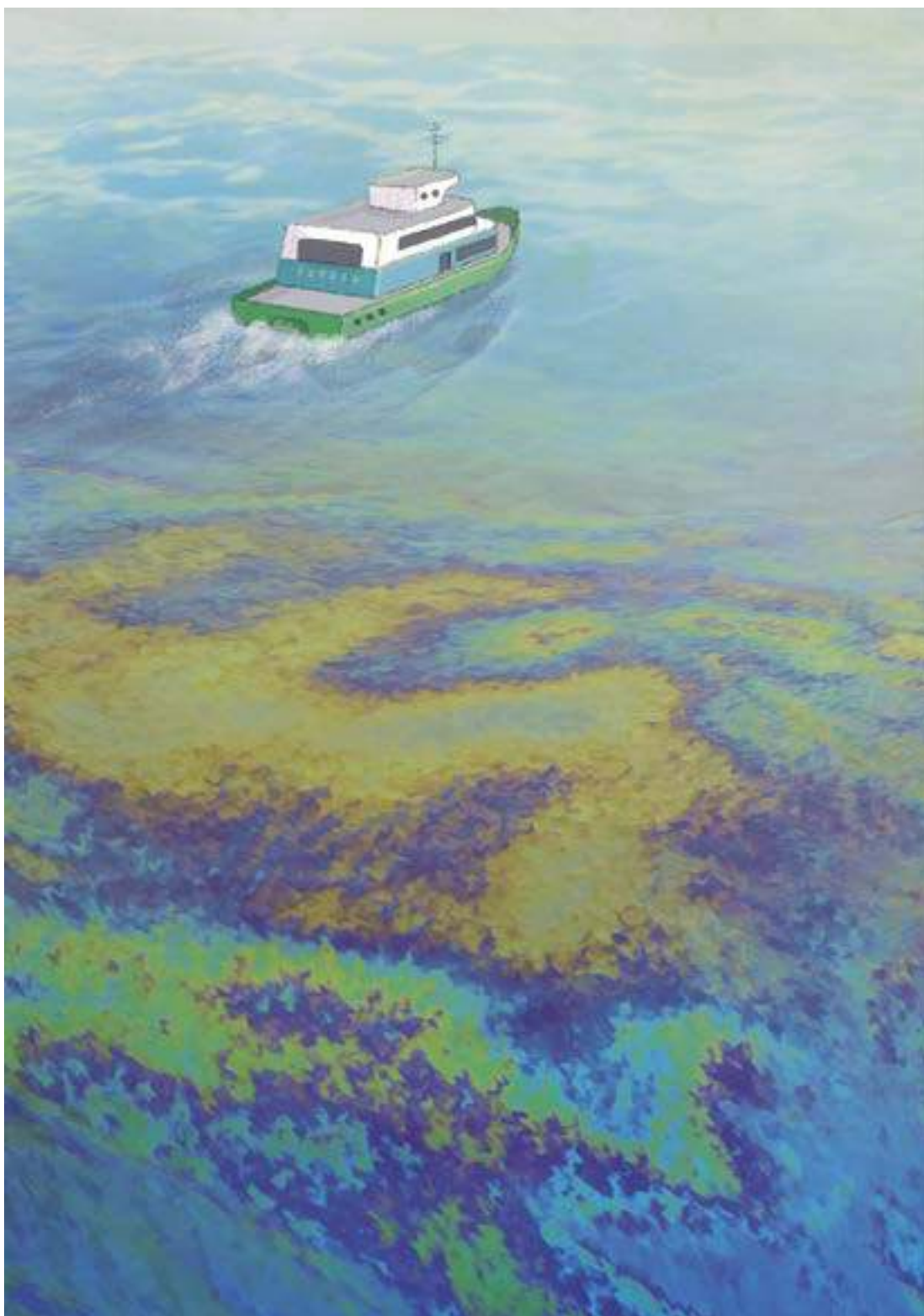
Human activities that pollute our waters and rivers destroy their wildlife cards #1

Spraying

Anyone with a small garden or fruit trees and flowers must have been confronted with pests that destroyed the plant. Spraying at the right time protects our fruit trees and plants from pests and fungal diseases, so pesticides help to avoid significant damage in the garden as well. In agriculture, we use fertilizers (artificial nutrients) to make our plants grow as much as possible. Fertilizers and sprays are very soluble in water, so they easily get into groundwater by infiltrating the precipitation. Using too much spray (herbicide and fertilizer) can be very harmful and toxic to our waters, so groundwater under agricultural land is not suitable for drinking water use.



Human activities that pollute our waters and rivers destroy their wildlife cards #2



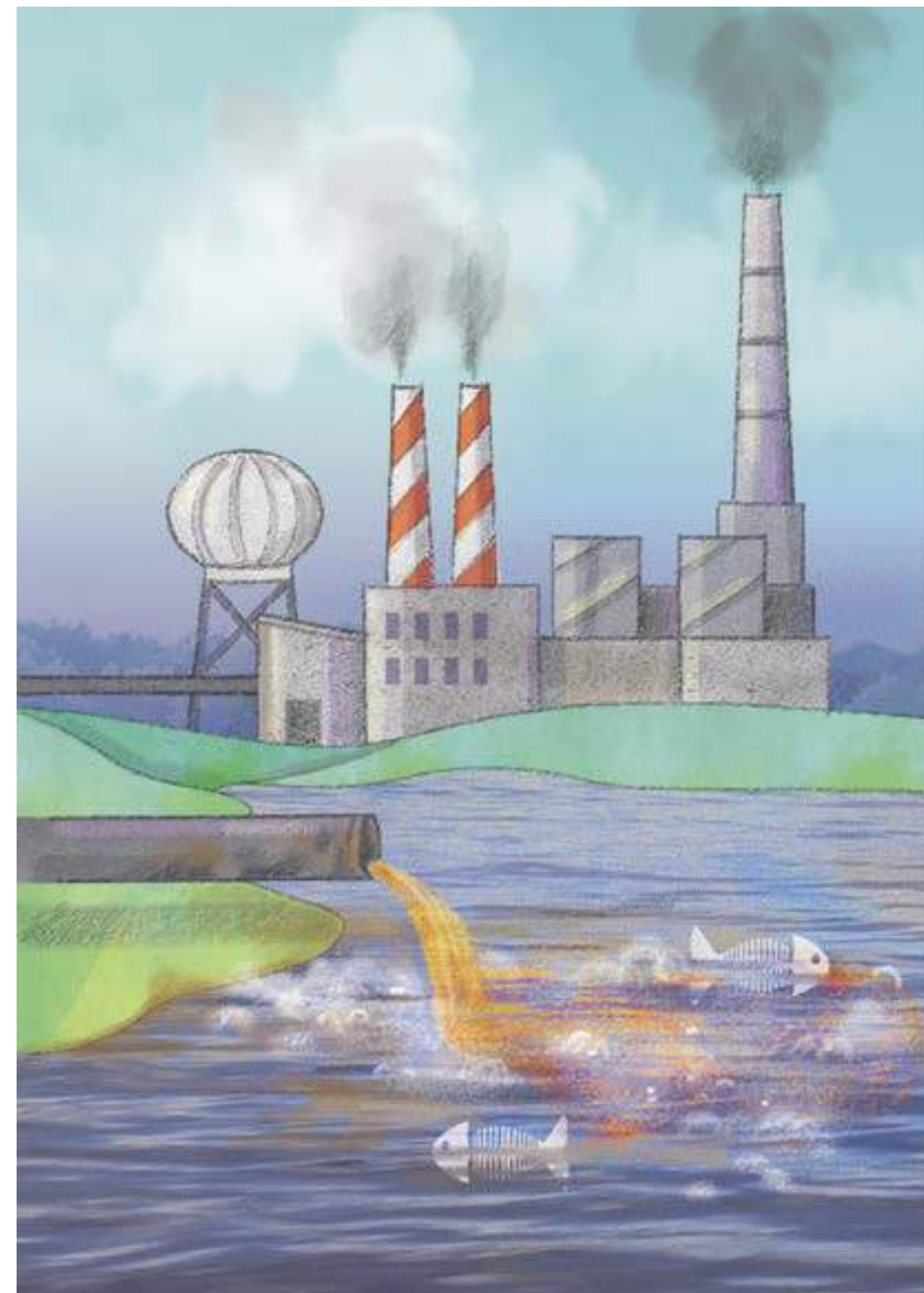
Oil pollution caused by shipping

Did you know? 1-2 m³ of spilled oil can prevent oxygen uptake and respiration by covering it with 1 km² of water surface.

Human activities that pollute our waters and rivers destroy their wildlife cards #3

Industrial pollution

Significant water pollutants are factories. They mainly degrade water quality by introducing pollutants into the water during the production of products and returning them to rivers and lakes without treatment.



Human activities that pollute our waters and rivers destroy their wildlife cards #4



Eutrophication

Eutrophication is the process by which an entire body of water, or parts of it, becomes progressively enriched with minerals and nutrients. It has also been defined as “nutrient-induced increase in phytoplankton productivity”. A process of pollution that occurs when a lake or stream becomes over-rich in plant nutrient; as a consequence it becomes overgrown in algae and other aquatic plants. The plants die and decompose. In decomposing the plants rob the water of oxygen and the lake, river or stream becomes lifeless. Nitrate fertilizers which drain from the fields, nutrients from animal wastes and human sewage are the primary causes of eutrophication.

Human activities that pollute our waters and rivers destroy their wildlife cards #5



Drug / pharmaceutical residues in water

Drug residues are all chemical contaminants released into the environment that contain various active pharmaceutical ingredients and their breakdown products (metabolites). These include various analgesics, anti-inflammatory drugs, hormones, antibiotics, diuretics, contrast agents, sedatives, etc., which are currently used in large quantities in medicine.

<https://waterquality.danube-region.eu/occurrence-of-pharmaceuticals-in-the-waters-of-the-danube-region-study/>

Human activities that pollute our waters and rivers destroy their wildlife cards #6

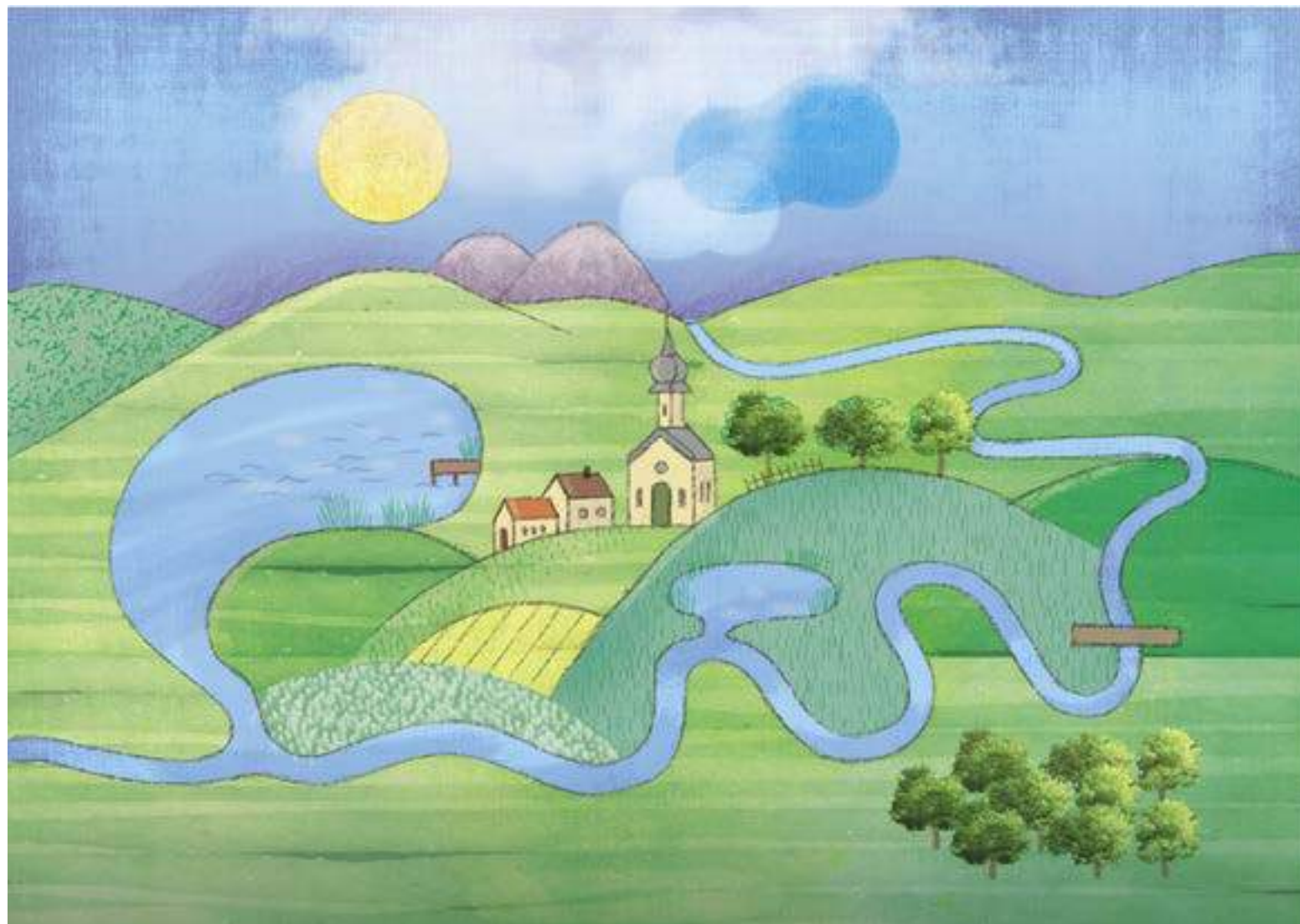
Plastic pollution of waters

80% of all pollution in seas and oceans comes from land-based activities, rivers deliver a significant portion of plastic pollution. Research indicates that only 10 rivers (8 in Asia and 2 in Africa) are responsible for the transport of 88–95% of the global plastic load into the sea. While Danube is luckily not part of them, researches and expeditions show that plastic pollution is present there, too.

<https://waterquality.danube-region.eu/eusdr-pa4-brochure-on-plastic-pollution-of-rivers-in-the-danube-region/>



River regulation cards #1



River regulation

The purpose of river regulation is to improve drainage or navigation conditions or to provide shores over a longer section of river, based on a uniform plan. An important goal of river regulation is to help floods recede faster. During the works, the rivers are shortened and regulated by cutting through the bends. The purpose of river regulation is to provide flood control, irrigation and river navigation.

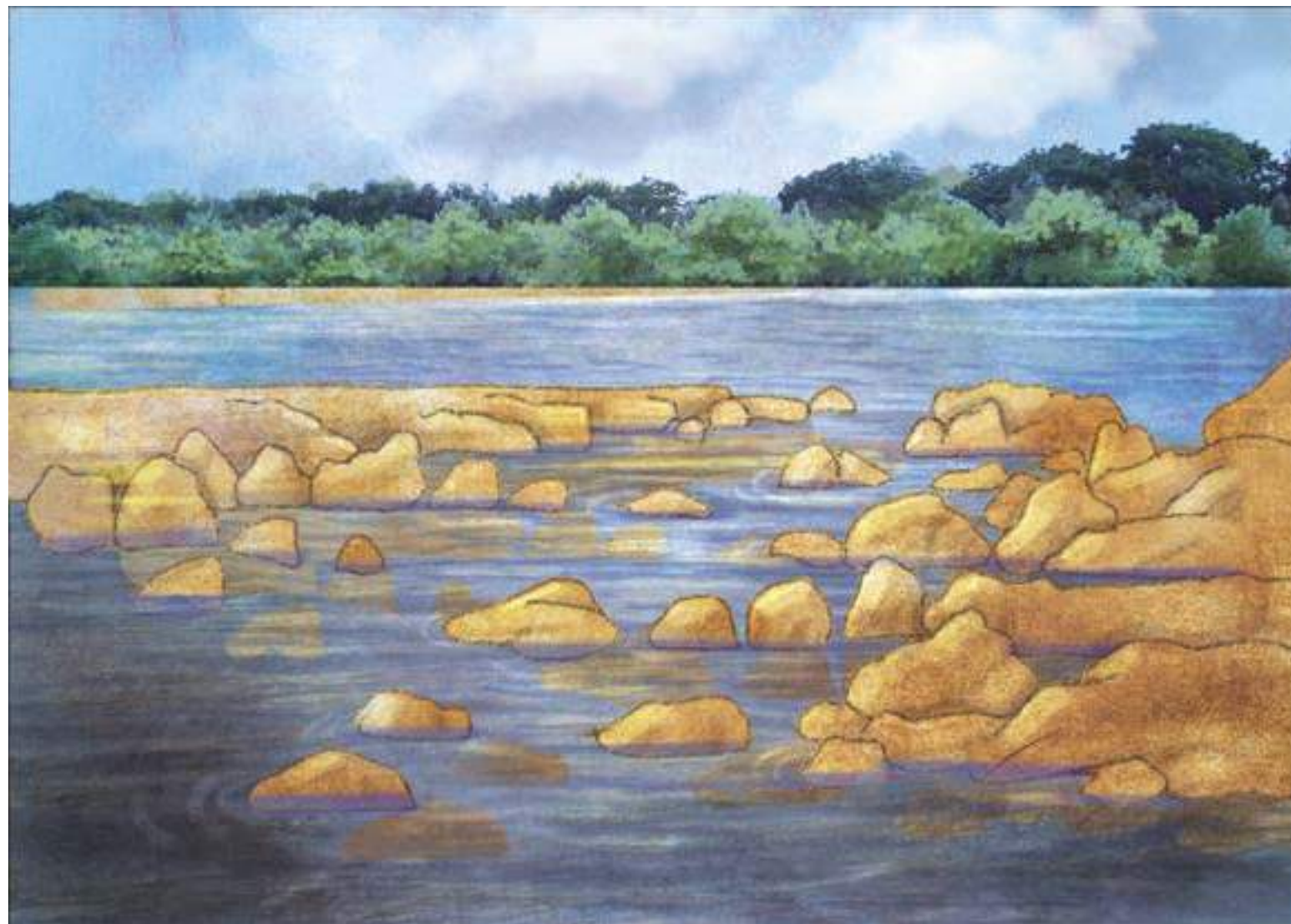
River regulation cards #2

Dam

A dam is a barrier that stops or restricts the flow of surface water or underground streams. Reservoirs created by dams not only suppress floods but also provide water for activities such as irrigation, human consumption, industrial use, aquaculture, and navigability. Hydropower is often used in conjunction with dams to generate electricity. A dam can also be used to collect or store water which can be evenly distributed between locations. Dams generally serve the primary purpose of retaining water, while other structures such as floodgates or levees (also known as dikes) are used to manage or prevent water flow into specific land regions.



River regulation cards #3



Bottom weir

A facility that raises the bedrock level using natural materials (stone, large gravel).

River regulation cards #4



Fish ladder

Fish ladder: equipment in river dams that facilitates the migration of fish. Its function is to allow fish to cross the watercourse in both directions at all times.

River regulation cards #5

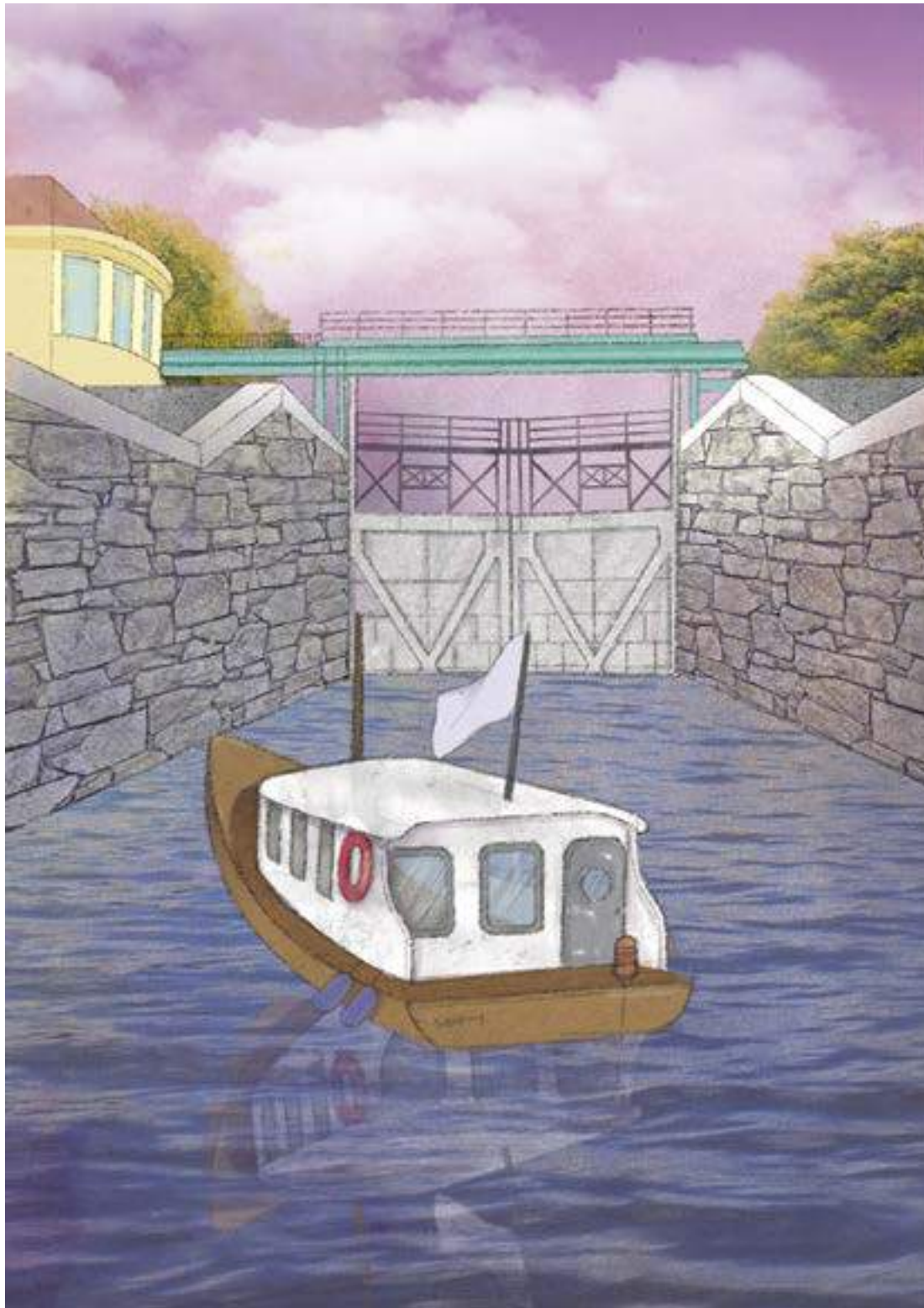


Hydroelectricity, or hydroelectric power

Hydroelectricity, or hydroelectric power is electricity produced from hydropower.



River regulation cards #6



Lock

A lock is a device used for raising and lowering boats, ships and other watercraft between stretches of water of different levels on river and canal waterways. The distinguishing feature of a lock is a fixed chamber in which the water level can be varied; whereas in a caisson lock, a boat lift, or on a canal inclined plane, it is the chamber itself (usually then called a caisson) that rises and falls. Locks are used to make a river more easily navigable, or to allow a canal to cross land that is not level. Later canals used more and larger locks to allow a more direct route to be taken.



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